5.2 AGRICULTURE AND FORESTRY RESOURCES

Information contained in this section is summarized from the following documents:

- *California Agricultural Land Evaluation and Site Assessment (LESA) for the Quarry Creek Project,* Planning Systems, March 20, 2012 (Appendix E);
- *EIR-Level Soil and Geologic Reconnaissance,* GEOCON, October 20, 2011 (Appendix J-1);
- *Geotechnical Investigation,* GEOCON, January 27, 2012 (Appendix J-2); and
- *Former South Quarry Amended Reclamation Plan Draft and Final EIR* (referred to herein as Reclamation Plan EIR), HELIX Environmental Planning Inc, September 2008 and February 2010, respectively.

The technical appendices are included on the attached CD found on the back cover of this Environmental Impact Report (EIR). Additional background information on land uses was gathered from the City of Carlsbad General Plan and Zoning Ordinances.

5.2.1 Existing Conditions

The project site is comprised of predominately undeveloped lands. Although not developed, the majority of the Reclamation parcel has been disturbed and original native soils have been removed and/or redistributed as a result of aggregate material mining and processing activities and subsequent reclamation. No portion of the project site has historically been, nor is currently utilized for agricultural production or related uses.

Agricultural land is identified immediately off-site, west of the Reclamation parcel and north of the Panhandle parcel. This area comprises four contiguous parcels totaling 25 acres; however, only a portion of this area is actually subject to farming activities.

5.2.2 Regulatory Setting

State

California Land Conservation Act

The Williamson Act (California Land Conservation Act 1965, California Government Code, Section 51200 et seq.) is a statewide mechanism for the preservation of agricultural land and open space land. The act provides a comprehensive method for local governments to protect farmland and open space by allowing lands in agricultural use to be placed under contract (agricultural preserve) between a local government and a land owner. There are no lands under Williamson Act contract located within or in proximity to the project site.

Farmland Security Zones

In August 1998, the Williamson Act's Farmland Security Zone (FSZ) provisions were enacted with the passage of Senate Bill 1182 (Costa, Chapter 353, Statutes of 1998). This sub-program, dubbed the "Super Williamson Act," enables agricultural landowners to enter into contracts with the County for 20-year increments with an additional 35 percent tax benefit over and above the standard Williamson Act

contract. There are no lands located within Farmland Security Zones within or in proximity to the project site.

California Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC), under the Division of Land Resource Protection, has set up the Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the state's farmland to and from agricultural use. The map series identifies eight classifications and uses a minimum mapping unit size of ten acres. The program also produces a biannual report on the amount of land converted from agricultural to non-agricultural use. The program maintains an inventory of state agricultural land and updates its "Important Farmland Series Maps" every two years. According to the 2008 San Diego County Important Farmland Map, portions of the project site contain "Unique Farmland" and "Farmland of Statewide Importance" (California Department of Conservation 2008).

Local

City of Carlsbad Zoning Ordinance

The project site is currently zoned Industrial (M) and One-Family Residential (R-1). The Industrial (M) is intended for a variety of industrial related uses, and agriculture is not a permitted use within this zone. The One-Family Residential (R-1) zone is intended to implement lower-density residential development, although agricultural crop use is a permitted use in this zone.

5.2.3 Project Impacts

5.2.3.1 Thresholds of Significance

As defined in Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, project impacts to agriculture and forestry resources would be considered significant if the project was determined to:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, Forest Land (as defined in Public Resources Code Section (12220(g)), Timberland (as defined by Public Resources Code Section 4526), or timberland-zoned Timberland Production (as defined by Government Code Section 51104(g));
- Result in the loss of Forest Land or conversion of Forest Land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of Forest Land to non-forest use.

Land Evaluation and Site Assessment Model

The Land Evaluation and Site Assessment (LESA) Model provides an objective methodology for determining the relative value of agricultural land resources and the degree of CEQA significance associated with development of the land. The evaluation considers both agricultural suitability and the socioeconomic attributes that contribute to agricultural values. Agricultural suitability is based on the quality and quantity of soil found on the site. The socio-economic factors included in the evaluation are project size, water resource availability, extant of agricultural lands surrounding the proposed project and the extent of any protected resources lands that surround the proposed project.

The LESA model is a point-based approach that is generally used for rating the relative value of agricultural land resources. In basic terms, a given LESA model is created by defining and measuring two separate sets of factors. The first set, land evaluation, includes factors that measure the inherent soil-based qualities of land as they relate to agricultural suitability. The second set, site assessment, includes factors that are intended to measure social, economic, and geographic attributes that also contribute to the overall value of agricultural land. While this dual rating approach is common to all LESA models, the individual land evaluation and site assessment factors that are ultimately utilized and measured can vary considerably, and can be selected to meet the local or regional needs and conditions for which a LESA model is being designed to address.

The U.S. Department of Agriculture (USDA) Land Capability Classification (LCC) indicates the suitability of soils for most kinds of crops. Groupings are made according to the limitations of the soils when used to grow crops and the risk of damage to soils when they are used in agriculture. Soils are rated from Class I to Class VIII, with soils having the fewest limitations receiving the highest rating (Class I). Specific subclasses are also utilized to further characterize soils. The LESA analysis indicates an overall Land Compatibility Score of 14 for the property, which falls in Land Capability Classification VII.

The Storie Index provides a numeric rating (based upon a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture. The rating is based upon soil characteristics. Four factors that represent the inherent characteristics and qualities of the soil are considered in the index rating. The factors are: profile characteristics, texture of the surface layer, slope, and other factors (e.g., drainage, salinity) (LESA Manual 1997).

Ordinarily, Storie Index data would be considered as the second of the Land Evaluation Criteria. However, Storie Index data are not readily available for the non-native fills that overlie much of the subject property. The LESA Instruction Manual allows for the Land Evaluation to be based on the LCC score solely when Storie Index data is not available due to time or resource constraints, such as the situation of compacted fill, undocumented fill, and unmapped topsoil non-native fills which cover much of the site.

Consistent with the allowances in the LESA Manual, in the absence of Storie Index data, the LCC score will represent 50 rather than 25 percent of the overall LESA factor weighing per the requirements of the LESA method (LESA Manual 1997). The LESA Instruction Manual provides thresholds for determining the significance of developing the project site in terms of agricultural resources under CEQA as shown in Table 5.2-1 below.

Table 5.2-1. Final LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA sub-scores are greater than or equal to 20 Points
60 to 79 Points	Considered Significant unless either LE or SA sub-score is less than 20 Points
80 to 100 Points	Considered Significant

If the total LESA score is between 0 and 39 points, the impacts to agricultural land are not considered significant. A LESA score between 40 and 59 points is considered significant only if land evaluation factors and site assessment factor sub-scores are greater than or equal to 20 points. A LESA score of 60 to 79 points is considered significant unless either land evaluation factors or site assessment factor sub-score is less than 20 points. If the total LESA score is between 80 and 100 points, the impacts to agricultural land are considered significant.

The California LESA Model also includes four Site Assessment factors that are separately rated:

1. The Project Size Rating;
2. The Water Resources Availability Rating;
3. The Surrounding Agricultural Land Rating; and
4. The Surrounding Protected Resource Land Rating.

This analysis evaluates the potential for the proposed project, as described in Section 3.0 Project Description of this EIR, to adversely impact agricultural resources within the project site based on the applied significance criteria as identified above.

5.2.3.2 Environmental Impacts

Farmland Conversion

On-site Agriculture. According to the 2008 San Diego County Important Farmland Map, portions of the project site contain "Unique Farmland" and "Farmland of Statewide Importance" (California Department of Conservation 2008). The project site is not currently zoned for agriculture and is not under a Williamson Act contract.

Planning Systems prepared a LESA analysis in March 2012 for the proposed project site (Appendix E). A summary of the results is provided in Table 5.2-2 below. Based on the results of the LESA model, the project site characteristics equate to a LESA score of 27.0. This analysis concludes that the project site score is below the threshold level of significance with respect to containing significant agricultural resources (as identified above) primarily because much of the topsoil of the project site has been removed and/or redistributed as a result of the historical aggregate mining activities and subsequent reclamation. As a result, the project site is determined to not possess prime agricultural farmland. Therefore, the conversion of existing farmlands on the project site to other uses is considered less than significant.

Table 5.2-2. Final LESA Model Score for the Proposed Project

LESA Evaluation Factor	Weighting Factor	X	Factor Rating	=	Weighted Factor Rating
Land Evaluation Factors					
Land Capability Classification (LCC)	0.50	X	14	=	7.0
Storie Index	-		-	=	-
Site Assessment Factors					
Project Size	0.15	X	50	=	7.5
Water Resource Availability	0.15	X	80	=	12.0
Surrounding Agricultural Lands	0.15	X	0	=	0
Surrounding Protected Resource Lands	0.05	X	10	=	0.5
Total LESA Score	1.0				27.0

Off-site Agriculture. As previously discussed, there is existing agricultural land located immediately west of the Reclamation parcel and north of the Panhandle parcel (see Figure 4-1 in Section 4.0 Environmental Setting). The agricultural operation is very limited in size and is not subject to intensive agricultural activity. The proposed project does not involve development that would encroach on adjacent agricultural land, and this off-site agricultural area is not formally designated for agricultural use (i.e., it is not zoned for agriculture use). Furthermore, the project would not restrict or otherwise inhibit access to these areas which would in turn impact these current agricultural uses.

The proposed open space areas along the northern boundary of the Panhandle parcel and in the western portion of the Reclamation parcel would provide a buffer between the off-site agricultural land and proposed residential development. The proposed project would not involve any other changes that could result in the conversion of farmland to non-agricultural use or conversion of Forest Land to non-forest use. Therefore, a less than significant impact is identified for this issue area.

Conflict with Williamson Act or Agricultural Zoning

The proposed project site and adjacent properties are not under Williamson Act contract or zoned for agricultural use. Therefore, no impact associated with conflicts with existing zoning for agricultural use, or a Williamson Act contracts would result.

Forest Land and Timberland Production

The project site is currently zoned for residential and industrial uses and is not zoned for Forest Land (as defined in Public Resources Code Section (12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland-zoned Timberland Production (as defined by Government Code Section 51104(g). There are no existing forest lands, timberlands, or timberland-zoned Timberland Production either within the project site or in the immediate vicinity. Therefore, implementation of the proposed project would not result in the conversion of Forest Land or Timberland Production lands within the project site or vicinity. Therefore, no impact is identified for this issue area.

Offsite Improvements

Implementation of the proposed project will require construction of several offsite improvements. These improvements include the construction of sewer lines/connections, and water and reclaimed water lines/

connections to serve the project. The reclaimed water line is the longest offsite improvement and will be installed in a portion of Tamarack Avenue. Also, off-site improvements include one of the project's proposed public use trailheads, which would be located at the easterly terminus of Marron Road for that portion of the road within the City of Carlsbad located east of El Camino Real (east of the Vons shopping center). As shown in Figure 3-10, this offsite trailhead would include a vehicular turn-around and trail parking lot which would be provided within the existing right-of-way. In addition to utility and trailhead improvements, improvements will be made to Haymar Drive, and there will be some limited grading in the parcel immediately east of Planning Area R-1, outside of the project site boundary, adjacent to El Salto Falls as well as grading for the placement of fill against the existing retaining wall located at the property line of the Quarry Creek Plaza shopping center (in order to improve the appearance of the wall).

The offsite improvements would not impact the existing agricultural land located off-site, as discussed above. There would be no impact to land identified as "Prime," Unique" or "of Statewide Importance" as a result of the off-site improvements. Additionally, the offsite improvements are not located in an area identified as forest or timberland production. Therefore, implementation of the offsite improvements would not result in impacts to agricultural production or forest or timberland production.

5.2.4 Level of Significance Before Mitigation

No significant impact has been identified.

5.2.5 Environmental Mitigation Measures

No mitigation measures are required.

5.2.6 Level of Significance After Mitigation

No significant impact to agriculture and forestry resources has been identified.